

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION
10/789,659	02/27/2004		Pieter G. Wybro	144599/MOD012	9153
23444	7590	12/03/2004		EXAMINER	
ANDREWS		•	SALDANO, LISA M		
	600 TRAVIS, SUITE 4200 HOUSTON, TX 77002		·	ART UNIT	PAPER NUMBER
,				3673	

DATE MAILED: 12/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	-1				
Office Action Summan	10/789,659	WYBRO ET AL.	S				
Office Action Summary	Examiner	Art Unit					
	Lisa M. Saldano	3673					
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet w	ith the correspondence add	ress				
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rep If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a ply within the statutory minimum of thir will apply and will expire SIX (6) MON te, cause the application to become Al	reply be timely filed ty (30) days will be considered timely. NTHS from the mailing date of this con BANDONED (35 U.S.C. § 133).	nmunication.				
Status							
1) Responsive to communication(s) filed on 27 F	ebruary 2004.						
<u> </u>	s action is non-final.	•					
3) Since this application is in condition for allows closed in accordance with the practice under	•		merits is				
Disposition of Claims							
4) ☐ Claim(s) 1-44 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1-4,6-26 and 28-44 is/are rejected.  7) ☐ Claim(s) 5 and 27 is/are objected to.  8) ☐ Claim(s) are subject to restriction and/or	awn from consideration.						
Application Papers							
9) The specification is objected to by the Examin-	er.	•					
	))⊠ The drawing(s) filed on <u>22 March 2004</u> is/are: a)⊡ accepted or b)⊠ objected to by the Examiner.						
Applicant may not request that any objection to the							
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E		• •	` '				
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureat * See the attached detailed Office action for a list	nts have been received.  Its have been received in Apprity documents have been au (PCT Rule 17.2(a)).	application No received in this National S	tage				
Attachment(s)							
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08</li> </ol>	Paper No(	Summary (PTO-413) s)/Mail Date nformal Patent Application (PTO-	152)				
Paper No(s)/Mail Date <u>2/27/2004</u> .	6) Other:		,				

#### DETAILED ACTION

#### **Drawings**

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the instrumented pins as claimed in claim 31 and the control panel as claimed in claim 32 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Application/Control Number: 10/789,659

Art Unit: 3673

Claim Objections

Page 3

2. Claims 1 and 21 are objected to because of the following informalities:

Regarding claim 1, line 10, the applicant recites limitations directed to "said tension leg platform." However, prior claim language from which this claim depends fails to mention a tension leg platform.

Regarding claim 21, line 2, it appears that the applicant should rewrite the claim to recite "...performed by a fairlead disposed...," deleting the unnecessary word "is" to make the claim read more clearly.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Application/Control Number: 10/789,659

Art Unit: 3673

4.

Claims 1-4, 6-15, 17-22, 24, 25, 28-30, 34-38 and 42-44 are rejected under 35

Page 4

U.S.C. 102(b) as being anticipated by Borseth (6,106,198).

Regarding claims 1, 2, 7, 9-18, 24, 28, 42 and 43, Borseth discloses a method for installation of tension-leg platforms 9 (TLP) and flexible tendons 19. The tension leg platform does not comprise any temporary stability or buoyancy modules coupled thereto. Borseth discloses that the method is used to install a plurality of anchors between the TLP and sea floor (see column 5, lines 12-18). Borseth discloses an opening within monopod 10 and grooves 71 within deflectors 38 that function as connection sleeves to receive upper end of tendons 19, the upper ends being in the form of chains 37 (see Figs 9A). Borseth further discloses winches 42 that function as tensioning devices and wires 41 that function as pull down tension members for the tendons 19 (see Fig.9A). Borseth further discloses the steps of anchoring the tendons to the sea floor (see Fig.7), coupling the wires 41 to upper ends of the tendons 19, and tensioning the wires using the winches to anchor and keep the TLP submerged (see columns 5 and 6 for the method steps).

Regarding claim 3, the winches are capable of inducing tension in the pull-down tension members to submerge the vessel without ballasting (see Fig. 9A).

Regarding claim 4, Borseth discloses that the vessel may comprise ballast (see column 7, lines 5-8).

Regarding claim 6, Borseth discloses the aforementioned features in addition to a flowchart in Fig.4.

Art Unit: 3673

Regarding claims 8 and 44, Borseth discloses that float 15 may be moved to compensate for resonance that would otherwise be created. He also discloses that the float generates a stabilizing moment in combination with TLP teeth (see column 7, lines 33-45).

Regarding claim 19, Borseth disclose the use of a stopper 40 to lock the chain 37 in place once the desired tension is obtained (see column 6, lines 33-36).

Regarding claims 20-22 and 30, Borseth discloses deflectors 38 that route the tension members to provide a generally vertical pull on the tendon or mooring member. There

Regarding claim 25 and 29, Borseth's platform 12 functions as an integrated deck.

## Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 16 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borseth as applied to claim 14 above, and further in view of Wetmore (4,604,001).

Borseth discloses the invention as described above.

However, Borseth fails to disclose a jack.

Art Unit: 3673

Wetmore discloses a jackdown tension leg platform comprising jacking mechanisms that permit the driving of members of a platform to move them upward (see column 4,lines 28-32).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Borseth to comprise a jacking mechanism to move a portion of the TLP, as taught by Wetmore, because Wetmore teaches that jacking mechanisms may be used to move structural members, just a winches do. In this particular application, the winch and a jacking mechanism are mechanical equivalents.

7. Claims 23, 26 and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borseth as applied to claim 14 above, and further in view of Vincken et al (3,681,928).

Borseth discloses the invention as described above.

However, Borseth fails to disclose remote controls of the devices and measuring devices.

Vincken et al discloses a method and apparatus for carrying out underwater well operations comprising a controller 27 and winches for cable/tendon engaging means (see Fig.1 and column 3, lines 38-45). Vincken et al disclose that the controller 27 can be used to keep cables 14 used proper load by means of automatic or remotely controlled coupling equipment (see column 5, lines 5-15). Furthermore, Vincken et al disclose the use of sensing devices 29.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Borseth to comprise remote controls, as taught by Vincken et al, because Vincken et al clearly teach that cables for the movement of a floating vessel may be manipulated by remotely controlled equipment. Incorporation of such a feature allows the

Application/Control Number: 10/789,659 Page 7

Art Unit: 3673

invention to be run with greater ease from various locations. Furthermore, it would have been obvious to incorporate the teaching of sensing devices, such as instrumented pins, to acquire measurement to further facilitate remote operation of the platform manipulation.

8. Claims 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borseth as applied to claim 28 above, and further in view of Wybro (5,551,802).

Borseth discloses the invention as described above.

However, Borseth fails to disclose a trolley device.

Wybro discloses a tension leg platform and method or installation therefore comprising a trolley device 407and track 405 that functions as a rail.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Borseth to include a trolley device and track or rails, as taught by Wybro, because provision of a trolley provides a means for transporting equipment and materials along the structural limits of the invention.

### Allowable Subject Matter

9. Claims 5 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Page 8

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa M. Saldano whose telephone number is 703-605-1167. The

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

examiner can normally be reached on Monday-Friday, 8:30am-5:30pm.

supervisor, Heather C. Shackelford can be reached on 703-308-2978. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

lms

HEATHER SHACKELFORD SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3600